

Supporting Document B

(Revised & updated: 6/30/06)

Upper Swift Creek Plan Amendment **Land Use Analysis - Residential, Office, Commercial and Industrial**

A. Purpose of Analysis

This analysis attempts to anticipate the need for residential, office, commercial and industrial land within the study area based on potential market demand and community-wide, land use planning practices. Specifically, real estate professionals often analyze potential uses for property based on the principle of “highest and best use”, a term often defined as ‘the legal use of a parcel of land which, when capitalized, will generate the greatest net present value of income’. Implied in the term is the notion that markets forces (supply, demand, competition, etc.) can best determine how land should be used. However, “highest and best use” is only one principle applicable to a land use analysis. Another, equally important principle is “most appropriate use” which, borrowing from the Code of Virginia, might be defined as ‘a coordinated, adjusted and harmonious development of lands within a jurisdiction which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of that jurisdiction’s citizens’. Consideration of both principles is appropriate in a land use plan analysis.

This analysis makes no attempt to determine the current or short-term marketability of any one parcel for any one use. Rather, it attempts to anticipate future needs for broad categories of uses throughout the study area over time. In addition, this analysis does not attempt to suggest the specific relationships of these uses to one another within the study area, or within the wider community. These relationships are best determined by means of a Comprehensive Plan amendment. Private market forces (availability and price of land, location, character and age of competing businesses, site specific characteristics such as topography and visibility from roads, etc.) would decide the desirability of a specific use on one parcel over another, as well as the timing for developing such use, based on the principle of ‘highest and best use’. The zoning process would determine the appropriateness of such use on a case-by-case basis by applying the guidelines for desirable land use development patterns as outlined in the plan.

Demand for additional, or differently located, land in any zoning classification or land use category is influenced by many factors, some of which are hard to quantify or predict. In addition, limitations on the types and quality of readily available data, together with differing opinions on the significance of this data and how best to analyze, interpret and use it, further complicate the task of predicting future land use needs. For these reasons, this analysis must be viewed as one of many tools used to craft a land use plan amendment for the Upper Swift Creek Plan study area.

B. Study Area Boundaries and Existing Conditions

The boundaries of the Upper Swift Creek Area Plan includes the Route 288 Corridor Plan to the north, the Southern and Western Area Plan and Central Area Plan to the south, Powhite/Route 288 Area Plan to the east, and Powhatan County to the west. A small portion of the adopted Upper Swift Creek Plan lies north of Midlothian Turnpike and east of Route 288, and is physically separated from the bulk of the Upper Swift Creek Plan by the Route 288 Corridor Plan. The Plan geography is approximately 57 square miles in area, comprising approximately 13 percent of the land area of the county.

The study area of this Plan amendment includes most of the geography of the currently adopted Upper Swift Creek (adopted in 1991). That small portion of the 1991 Plan physically separated from the study area by the Route 288 Corridor Plan is not included in the geography of this Plan amendment, but will be included in the Robious Area Plan amendment currently under review. The study area includes the majority of the Upper Swift Creek watershed within the jurisdiction of Chesterfield County.

Existing zoning and land use patterns within the study area reflect a mix of residential and agricultural zoning and uses, with commercial zoning and uses along Rt. 360. Rt. 360 provides a major east/west vehicular access, linking the study area with the rest of the county to the east and with Amelia County to the west. Route 288 provides a major north/south vehicular access, linking the study area with the rest of the county to the north and south, and also provides major vehicular access to Powhatan and Henrico Counties to the north. Powhite Parkway provides additional major vehicular access to the northeast portions of Chesterfield County and to the City of Richmond. Planned improvements to Powhite Parkway will further enhance vehicular access between the study area and the surrounding region.

C. Zoning Activity within the Study Area: (See attached Zoning map)

Analysis of past zoning activity is one way to anticipate future demand for residential, office, commercial, and industrial zoning and land uses within the study area. Specifically, land is typically rezoned with an expectation, on the part of the owner/developer, that it can be developed in the future for uses within the new zoning category. The following table summarizes zoning activity within the study area between January 1, 1993 and December 31, 2005:

Type of Zoning Activity	Acreage
Rezoning from agricultural to residential classifications	3,798 acres
Rezoning from industrial to residential classifications	17 acres
Rezoning from agricultural to commercial/office classifications	134 acres
Rezoning from residential to commercial/office classifications	23 acres
Rezoning from agricultural to industrial classifications	23 acres
Rezoning from industrial to commercial/office classifications	36 acres

Data compiled from Chesterfield County Planning Department zoning database from January 1993 through December 2005

Zoning activity within the study area since 1993 has significantly increased the inventory of residentially zoned land, followed by slight increases in commercial and office zoned land. The following table summarizes net zoning gains/losses within the study area between January 1, 1993, and December 31, 2005:

Industrial	- 30 acres
Commercial/office	+ 193 acres
Residential	+ 3,792 acres
Agricultural	- 3,955 acres

Data compiled from Chesterfield County Planning Department zoning database from January 1, 1993 through December 31, 2005

The following table summarizes the breakdown of zoning acreage and land usage within the study area as of December 31, 2005:

Upper Swift Creek Plan - Zoning and Development

(Note: the study area represents approximately 13% of the county)

Zoning (as of 12/31/05)	Acres	% of total	% of county- wide by zoning category	Developed (as of 12/31/05)	Minimal improvements *	% Minimal improvements *
Agricultural	16,562	47	11	6,506	10,056	61
Residential	16,031	46	19	5,248	10,783	67
Office & Commercial	1,665	5	19	592	1073	64
Industrial	668	2	4	148	520	78
Totals	34,926	100				

Data for zoning compiled from Chesterfield County GIS data for 12/31/05

Note: This data is a reflection of base zoning only and does not factor uses that may be permitted through CUPD (such as commercial uses on residentially zoned property, etc.) Acreages do not include land in rights of way. Data for development compiled from the Chesterfield County Planning Department land use database for 2005 (12/31/05)

*Less than \$1,000 worth of improvements and open water. Acreages do not include land in rights of way.

Zoning activity - - Conclusions: Based on zoning activity over the last decade, the demand for residentially zoned land is strong, followed by the demand for commercially zoned land. Current zoning activity, as judged by zoning cases within the Plan geography currently pending before the

Planning Commission and the Board of Supervisors, suggests that the demand for residentially zoned land will continue to remain strong in coming years.

E. Residential Development Activity within the Study Area: (See attached map: Development Activity January 1, 1994 – December 31, 2005)

Another way to anticipate future demand for residential, office, commercial, and industrial zoning and land uses is to examine development activity in recent years. The influx of new families into the area and the development of new housing units in subdivisions and apartment complexes suggest a demand for residential land uses. Site plan approvals for offices, businesses, and manufacturing facilities suggest a demand for office, commercial and industrial land uses. Projecting population growth in and around the study area can also suggest future demand for housing, jobs, services and retail trade.

The following table estimates population growth rates between January 1, 1994 and December 31, 2005 for the study area and the county as a whole:

Chesterfield County Population Growth, January 1, 1994 to December 31, 2005

Area	1994	2005	% Increase
Study Area	27,900	40,300	44
Countywide	226,900	299,000	32

Data for population compiled from estimates in the Chesterfield County Planning Department land use database for 2005 (12/31/05).

As indicated in this table, the study area's population growth rate, from 1994 to 2005, is estimated to be about a third greater than countywide population growth rate for the same period.

Residential development within the study area is characterized primarily by single-family residences on acreage parcels, by single family and townhouse residences in subdivisions, and by apartments and condominiums in multi-family complexes.

1. Single Family

A review of Chesterfield GIS data from January 1, 1994 through December 31, 2005 reveals an increase of 5,008 single-family residences (on acreage parcels and in single-family subdivisions) within the study area during this time period, from 8,201 residences to 13,209 residences, or an increase of about 61 percent. A similar review for the entire county during this time period for single-family residences reveals a countywide increase of about 19 percent.

According to the Residential Report, as of December 31, 2005, the study area had an inventory of about 4,749 undeveloped lots in recorded and tentatively approved subdivisions (approximately 27 percent of all lots within the study area). For the same year, the county as a whole had an inventory of 19,719 such lots (approximately 19 percent of all lots within the county).

2. Multi-family, Condominium, and townhouse

A review of Chesterfield GIS data from January 1994 through December 2005 reveals an increase of 1,042 multifamily, condominium, and townhouse residences within the study area during this time period, from 1,417 residences to 2,459 residences, or an increase of about 73 percent. A similar review for the entire county during this time period for multifamily, condominium and townhouse residences reveals a countywide increase of 50 percent.

According to the Residential Report, as of December 31, 2005, the study area had 269 undeveloped units in multi-family, condominium and townhouse developments (about 11 percent of all such units within the study area). For the same year, the county as a whole had an inventory of 3,046 undeveloped units (approximately 14 percent of all possible multi-family, condominium and townhouse units within the county).

F. Office, Commercial and Industrial Development Activity within the Study Area: (See attached map: Development Activity – January 1, 1994 through December 31, 2005)

1. Office Development

In recent decades, major office zoning and development activity (office park use) has occurred in the northern portions of the county, along Midlothian Turnpike and the Powhite Parkway corridor. In addition, many properties zoned for such use a decade or more ago have yet to begin developing. However, with the recent completion of improvements to Rt. 288, it is anticipated that such development will occur within, and in proximity to, the northern portions of the study area, in the vicinity of the Powhite Parkway/Rt. 288 interchange. As Powhite Parkway is extended to Rt. 360, additional office-type development should occur in proximity to this intersection.

2. Commercial Development

Commercial development patterns in the study area are primarily characterized by commercial zoning and uses along the Rt. 360 corridor. Some of this existing commercial development consists of small businesses on parcels having depths of 200 to 300 feet. An exception to this pattern is the Genito Road/Old Hundred Road intersection, which has developed as a significant node of commercial and office uses.

As noted in the Zoning Activity section of this report, the study area experienced a net increase of 193 acres of office and commercially zoned land between 1994 and 2005.

a. Commercial - - Shopping Centers

The study area includes several convenience scale, neighborhood scale, and community scale shopping centers and one power center. In addition, there are several planned community scale

shopping centers currently under review or anticipated for review in the near future. These shopping centers have overlapping market areas. Field inspections suggest the existing shopping centers are healthy, with low vacancy rates and well-maintained buildings, parking areas, and landscaped areas.

An analysis of commercial development within and surrounding the study area suggests that most of the area's current need for retail services is provided by shopping centers and other types of commercial establishments located inside and outside the study area. Specifically, in addition to the shopping centers located within the study area, much of the study area lies within the market areas of several other shopping centers and major retail concentrations, including Chesterfield Crossing and Chesterfield Towne Center. While most retail development within the study area is healthy, some exhibit symptoms of declining retail viability.

The demand for additional shopping center space in the future will be closely tied to market area growth. Specifically, convenience scale shopping centers typically draw most of their customers from an area of about 1.5 miles in radius (shopping center trade area). Neighborhood scale shopping centers typically have a trade area of about three miles in radius, and community scale shopping centers have a trade area of about 4.5 miles in radius. Power and regional centers have trade areas of about 7.5 miles in radius. Super regional centers typically have trade areas of about fifteen miles. While many of the services provided by various types of centers do not translate into competition between types, some services do. In addition, centers of a type that have overlapping trade areas often compete for the same markets. At present, the study area seems to be more than adequately served by existing and planned shopping centers.

Increases in population within the market areas of potential shopping center sites generate most of the demand for additional shopping center space. Other factors affecting the demand for additional shopping center space include market competition, both within and outside the study area, and anticipated area industrial employment. Specifically, existing and future shopping center development outside the study area could lower future shopping center demand within the area through competition for the same markets. Conversely, increases in population and industrial employment from new industrial development within, and in proximity to, the study area would have a positive impact, as a significant amount of retail sales would be generated by new area residents as well as by employees who live outside the corridor's market area but who will shop within the area on their way to and from work. The location of any new shopping center(s) within the study area would also be influenced by: the availability of suitably zoned land; parcel size, configuration, access and visibility; environmental constraints such as floodplains and wetlands; and by guidelines for desirable land use patterns as embodied in the county's Comprehensive Plan. The current Upper Swift Creek Plan (adopted in 1991) suggests locations for new shopping center development in the western portion of the study area, to serve the needs of anticipated area residential development.

b. Commercial - - Freestanding

In addition to existing and planned shopping centers, commercial development within the study area is characterized by freestanding commercial uses along Rt. 360 and in proximity to the Genito Road/Old Hundred Road intersection. Included among these uses are: small retail and convenience stores; contractors offices, shops and storage yards; motor vehicle repair; motor vehicle service

stations; personal services and professional offices; fast food restaurants; a hotel; mini-storage and office-warehouses; a commercial outdoor recreational establishment, among other uses. About half of these uses (by acreage) have developed since 1994.

The demand for additional freestanding commercial space is determined in part by the type of use occupying the site. Some freestanding uses, such as department and discount stores, have market areas similar to community scale shopping centers. Other uses, such as home centers and motor vehicle sales, draw from larger areas, to include countywide and even regional markets. Still other uses, such as convenience stores, fast food restaurants and automobile service stations, depend in large part on traffic generated by other uses, such as nearby shopping centers and employment centers, and on commuter traffic passing through the study area.

The location of any new freestanding commercial space would also be influenced by: the availability of suitably zoned land; parcel size, configuration, access and visibility; and environmental constraints such as floodplains and wetlands.

3. Hotel/Motel

At present, there is one hotel/motel within the study area, located at the intersection of Rt. 360 and Old Hundred Road. A site for another is currently under review, located further west along Rt. 360 in the vicinity of Woodlake. Recent hotel/motel development activity within the study area and along Rt. 360 at or near the intersection of Rt. 360 and Courthouse Road (east of the study area), suggests there may be a potential demand for additional hotel/motels in this portion of the county.

4. Industrial Development

Most industrial zoning and land uses within the study area are located around the Powhite/Rt. 288 interchange and the intersection of Genito and Old Hundred Roads.

As noted in the Zoning Activity section of this report, the study area has lost industrially zoned land since 1994, and industrially zoned land represents the smallest percentage of zoning within the study area. Only 22 percent of this industrially zoned land, or about 148 acres, has been developed, primarily for commercial-type uses (retail, offices, mini-warehouses) and for public/semi-public uses.